Pison (Parapison) simulans, sp. n.

3. Black, opaque; the tibiæ and tarsi ferruginous; the hind tarsi stained with black. Wings hyaline; nervures fuscous.

Clypeus produced into a short tooth in the middle of the apical margin; occlli in an equilateral triangle, the posterior pair as far from each other as from the eyes; second joint of the flagellum no longer than the third. Pronotum on a level with the mesonotum, with a distinct dorsal surface. Median segment as long as the mesonotum, narrowed towards the apex, as long as broad, finely obliquely striated, with a deep median groove in which is a well-defined carina, the surface of the posterior slope almost smooth, with a deep median groove. Abdomen subopaque, minutely and closely punctured, the first segment longer than its apical breadth; the second segment distinctly constricted at the base. Two cubital cells only, the first abscissa of the radius twice as long as the second, first recurrent nervure received just beyond three-fifths from the base of the first cubital cell, second close to the base of the second cubital cell.

Length 6.5 mm.

Hab. Eaglehawk Neck; March.

Nearest to Pison (Parapison) erythrocerum, Kohl, but differs in the stronger sculpture of the median segment, in the colour of the femora and antennæ, and in the much greater length of the second abscissa of the radius. Superficially it closely resembles P. rufipes, Shuck.

XLIX.—On Three new Bats obtained by Mr. Willoughby Lowe in the Sudan. By OLDFIELD THOMAS.

(Published by permission of the Trustees of the British Museum.)

DURING Mr. Abel Chapman's recent expedition to the Sudan, Mr. Willoughby Lowe obtained a considerable collection of mammals, and among them a number of bats. These include, besides Coleura afra, Mops demonstrator, and others, examples of the three following new species:—

Rhinopterus lowei, sp. n.

Larger than R. floweri; white instead of buffy below. General characters as in R. floweri, but size, as gauged by skull, distinctly larger. Colour apparently, judged by spirit-specimens, very much as in *R. floweri* above, but the whole under surface is entirely white, while in the type of *R. floweri* it is buffy, "light buff" posteriorly, and "warm buff" on the throat and chest.

Skull much larger than in R. floweri, the muzzle less

shortened in proportion to the brain-case.

Dimensions of the type (measured on the spirit-specimen):—

Forearm 40 mm.

Head and body 45; tail 36; ear 12.5; third finger, metacarpal 36.5, first phalanx 11.5; lower leg and hind foot

(c. u.) 12.

Skull: greatest length 13.5; condyle to front of canine 12.9; zygomatic breadth 9; interorbital breadth 4.6; intertemporal breadth 3.2; palato-sinual length 5.3; front of canine to back of m^3 5.

Hab. Sudan. Type from the Blue Nile, 20 miles above

Sennar.

Type. Adult male. B.M. no. 15. 3. 6. 70. Collected

13th December, 1913, by Willoughby P. Lowe.

Mr. Willoughby Lowe obtained five specimens of Rhinopterus at different localities on the Blue and White Nile. On examination of the skulls these prove all to belong to a larger form of the genus than R. floweri, living side by side with the latter in the same area—a phenomenon not unusual with the smaller bats. The Rhinopterus obtained by Dr. A. F. Wollaston at Shendi, and referred to in Anderson and de Winton's 'Mammals of Egypt,' also belongs to this larger form. Whether the difference in the colour of the under surface is constant remains to be seen.

Glauconycteris phalæna, sp. n.

Near G. variegata, but teeth smaller and incisors more slender.

Size as in G. variegata. Colour, of a spirit-specimen, apparently about as in that animal, the head and belly similarly whitish, but the back hardly so strongly buffy. The colour is therefore still further from that of the neighbouring G. variegata papilio **, in which both head and belly

^{*} I use this term for my Glauconycteris papilio, as I do not now think it should be specifically distinguished from variegata. The latter, however, in nature would simply appear to be a Damara desert race of the widely spread (Gambia to Beira) papilio, though the rules of nomenclature necessitate our putting the name the other way about.

are more or less strongly buffy. Wings strongly reticulated as in the allied species.

Skull essentially as in variegata, though the brain-case is perhaps, a little longer and narrower and the muzzle shorter

but the difference is very slight.

Incisors smaller and lighter than in variegata; i^1 slender, unicuspid in the type, but the presence or absence of a secondary cusp in this group appears to be variable. I^2 considerably smaller than in $variega^ia$, not crushed between and touching i^1 and the canine in front and behind, but clearly separated from each of them. Molars distinctly smaller than in variegata and papilio, the combined length on outer edge of m^1 and m^2 in eleven specimens of those forms, including types of both, being $2\cdot7-2\cdot8$ mm., while in the type of phalana it is only $2\cdot4$ mm.

Dimensions of the type (measured on the spirit-speci-

men):-

Forearm 44 mm.

Head and body 54; tail 44; ear 11.5; third finger, metacarpal 40, first phalanx 16; lower leg and hind foot (c. u.) 28.

Skull: greatest length 13.6; condylo-basal length 13.2; interorbital breadth 4.6; breadth of brain-case 8.1; palatosinual length 5; front of canine to back of m³ 4.8.

Hab. White Nile, near Fashoda.

Type. Adult female. B.M. no. 15. 3. 6. 67. Original number 71. Collected 27th January, 1914, by Willoughby P. Lowe.

Taphozous sudani, sp. n.

T. perforatus group. No gular sac. Feet comparatively

large.

Size slightly greater than in *T. perforatus*. Distribution of fur about as in that species, except that the longer hairs are less extended on the thighs and interfemoral membrane. General colour above and below sepia-brown, the hairs white for their basal two-thirds. Wing-membranes whitish or white beyond a line connecting the elbow with the knee; rest of the membranes brown, more whitish below. No gular sac in male or female, nor any trace of it on the skin. Feet decidedly larger than in *T. perforatus*, about 13 mm. in length or upwards, as compared with about 11 mm. in the allied species. Wing-membrane inserted on the end of the tibia, instead of the ankle.

Skull in general like that of T. perforatus, but slightly Ann. & Mag. N. Hist. Ser. 8. Vol. xv. 38

larger and the brain-case more swollen. Male skull decidedly larger than that of the female.

Dimensions of the type (measured on the spirit-speci-

men):-

Forearm 64 mm.

Head and body 71; tail 23; ear 17; third finger, metacarpal 58; first phalanx 21.5; lower leg and hind foot

(c. u.) 39; hind foot only 13.5.

Skull: greatest length to base of canine 20.2; condyle to front of canine 19.7; interorbital breadth 6.1; breadth of brain-case 10; palato-sinual length 6.5; maxillary toothrow 8.8.

Hab. Upper Nile. Type from Mongalla, just north of Lado: other specimens from Khartoum (Major H. N. Dunn)

and Lake No (Willoughby Lowe).

Type. Adult male. B.M. no. 2. 7. 4. 2. Collected and presented by W. L. S. Loat, Esq.

This species is distinguishable from T. perforatus by its larger feet, more swollen brain-case, and whitened wingmembranes; from T. hildegardea by its smaller size, the absence of any gular beard, and generally darker colour.

L.—On the African Shrews belonging to the Genus Crocidura.-II. By Guy Dollman.

[Continued from p. 527.]

Group 4 (hedenborgiana and nyansæ).

Size very large or large. Colour above deep chocolate-brown, reddish brown, or pale buffy drab; ventral surface dark brownish or grey, never very distinctly marked off from the brown-tinted flanks; tail not sharply bicolor, lower side generally only a little paler than upper. Second and third upper unicuspids about equal in size.

(10) Crocidura anchietæ, Boc.

Crocidura anchietæ, Bocage, Jorn. Sc. Lisb. p. 26 (1889).

About equal to occidentalis in size, but with shorter, less

tapering tail and lighter underparts.

Colour above (from spirit-specimens) dark reddish brown, rather paler and greyer on the flanks; the lighter underparts not distinctly marked off from the brownish tint of the dorsal surface. Belly slate-grey washed with silvery cream, lighter than in occidentalis, but not as pale as in